

a HANDBOOK for CITIZEN INVOLVEMENT on Circular Economy



FORCE
Cities Cooperating
For Circular Economy

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Figure 1: View of Copenhagen. Source: Photo by Ulrich Jakobsson, provided by the City of Copenhagen.

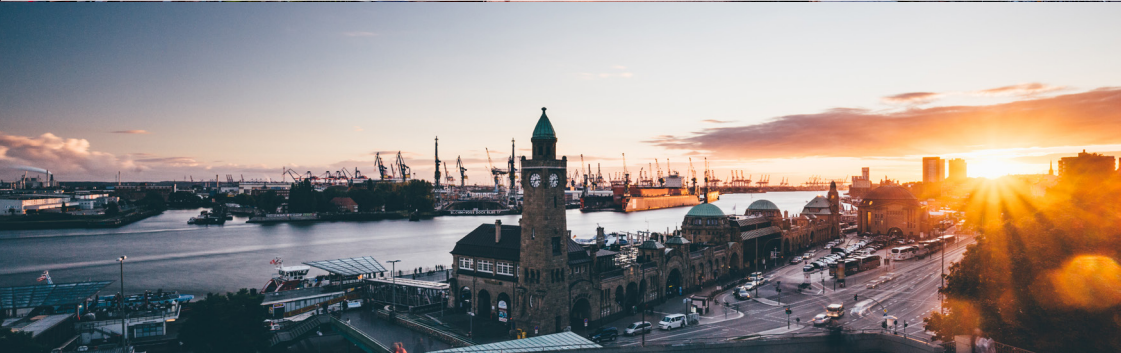


Figure 2: View of Hamburg. Source: Photo by Sascha Neuroth, available on www.mediaserver.hamburg.de.



Figure 3: View of Lisbon. Source: Photo provided by the Câmara Municipal de Lisboa.



Figure 4: View of Genoa. Source: Photo provided by GenovaCittaDigitale.

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Figure 5: Plastic waste. Source: Photo provided by the City of Copenhagen.

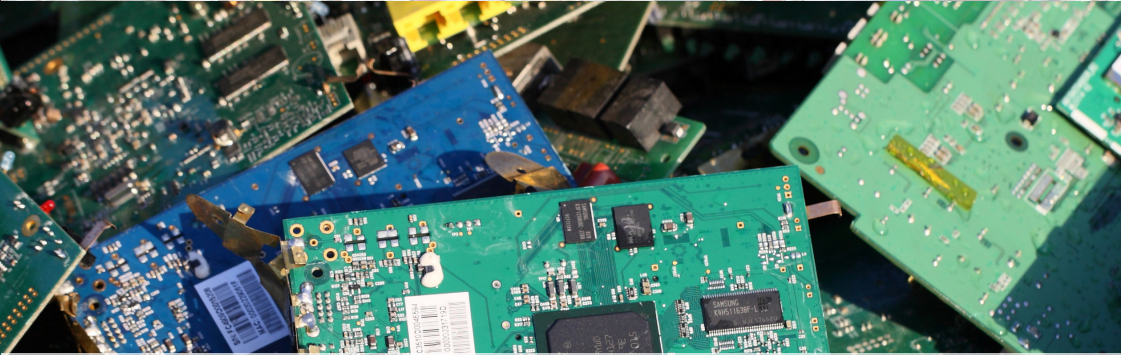


Figure 6: WEEE. Source: Photo provided by Aurubis AG.



Figure 7: Food waste. Source: Photo provided by the Câmara Municipal de Lisboa.



Figure 8: Driftwood. Source: Photo provided by Comune di Genova.

CONTENTS

about FORCE	1
about this HANDBOOK.....	3
STRATEGIC PLANNING.....	5
INCLUSIVITY	7
TRANSPARENCY.....	9
CONTINUITY	11
RESOURCES DEDICATED.....	13

about FORCE

The FORCE project aimed to minimise the leakage of materials from the linear economy and work towards a circular economy.

Four cities – Copenhagen, Hamburg, Lisbon and Genoa – worked together with enterprises, citizens and academia in 16 participatory value chain-based partnerships with the objective to demonstrate scalable and replicable eco-innovative solutions for a circular economy.

Each city set up one 'lead partnership' based on their choice of material and three 'local partnerships' replicating initiatives from the other cities. Viable end-market solutions were developed from the new applications tested for plastic waste, WEEE (strategic metals), food & biowaste and wood waste.

Approaches to foster stakeholder cooperation along the value chain and circular economy were developed. A FORCE Academy was set up to disseminate and exploit the project results.

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Programme

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Hamburg. Strategic Metals

Partners. City of Hamburg; Stadtreinigung Hamburg AöR; HafenCity University Hamburg; Hamburg University of Applied Sciences; Consist ITU Environmental Software GmbH; and AURUBIS AG.

Copenhagen. Plastic Waste

Partners. City of Copenhagen; Aage Vestergaard Larsen A/S; Teknologisk Institut (DTI); Letbæk Plast A/S; and Dansk Rotations Plastic ApS.

Lisbon. Food and Biowaste

Partners. City of Lisbon; Valorsul S.A.; DARIACORDAR; QUERCUS ANCN; AHRESP; and AddaptCreative

Genoa. Wood and Woodwaste

Partners. City of Genoa; Amiu Genova SpA; Ecolegno Genova srl; T.I.C.A.S.S.; and Active Cells srl.

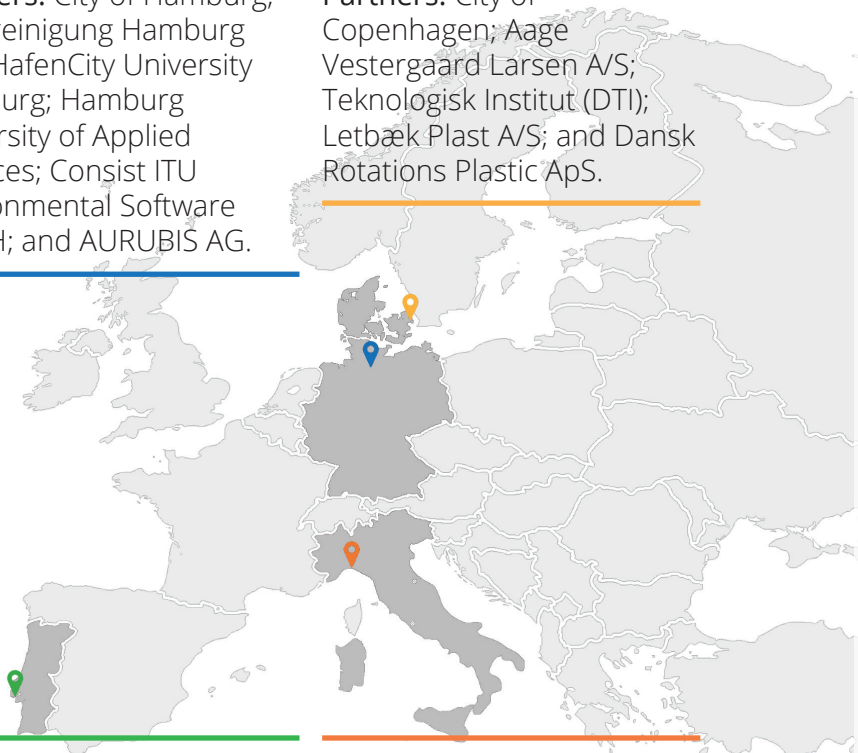


Figure 9: Map of FORCE Cities. Source: Adapted from "Blank Map of Europe", by Roke, 2006 (<https://commons.wikimedia.org/wiki/File:BlankMap-Europe-v4.png>).

about this HANDBOOK

Citizens are central actors within the waste management and circular economy context. The connection between them and waste management lies in their behaviour as consumers and waste producers. Individual consciousness while performing these two roles can lead to more responsible consumption, as well as compliance with waste separation schemes. Thus, citizen involvement through communication, consultation or participation is important for promoting pro-environmental behaviour in the area of waste management and circular economy.

The analysis of the citizen involvement tools and instruments applied in Copenhagen, Hamburg, Lisbon and Genoa during the FORCE project was based on an extensive literature review, an evaluation framework that was applied by four cities and in-depth interviews with representatives and communication experts of the waste management organisations from the project.

Based on the evaluation framework, five criteria have proven to be of high importance for reaching the objectives of citizen involvement: strategic planning; inclusivity; transparency; continuity and resources dedicated. This manual will provide a brief description of these criteria and their importance. Best practices examples from the four cities will be presented for inspiration.

A word cloud centered around the phrase "CIRCULAR ECONOMY" in large, teal, all-caps letters. Surrounding this central text are various other terms in different colors (orange, blue, green) and orientations (horizontal, vertical, diagonal). The words include: "RESOURCES DEDICATED" (orange, vertical), "STRATEGIC METALS" (blue, vertical), "WOOD WASTE" (orange, horizontal), "SENIOR CITIZENS" (orange, horizontal), "MULTIPLICATORS" (green, horizontal), "CITIZEN INVOLVEMENT" (teal, horizontal), "INCLUSIVITY" (blue, horizontal), "PLASTIC WASTE" (orange, horizontal), "ETHNIC MINORITIES" (blue, horizontal), "INTERMEDIARIES" (teal, horizontal), "CONVENIENCE" (orange, vertical), "TRANSPARENCY" (green, vertical), "BIO WASTE" (green, vertical), "NETWORKS" (orange, horizontal), "DRIFTWOOD" (orange, vertical), "FOOD WASTE" (green, horizontal), "WEEE" (blue, horizontal), "CONTINUITY" (blue, vertical), "DESIGN THINKING METHOD" (teal, vertical), and "STRATEGIC PLANNING" (orange, vertical).

RESOURCES DEDICATED
STRATEGIC METALS
WOOD WASTE
SENIOR CITIZENS
MULTIPLICATORS
CITIZEN INVOLVEMENT
INCLUSIVITY
PLASTIC WASTE
ETHNIC MINORITIES
INTERMEDIARIES
CONVENIENCE
TRANSPARENCY
BIO WASTE
NETWORKS
DRIFTWOOD
FOOD WASTE
WEEE
CONTINUITY
DESIGN THINKING METHOD
STRATEGIC PLANNING
CIRCULAR ECONOMY

STRATEGIC PLANNING

What does it mean? Strategic planning is a clear outline of a citizen involvement process including an assessment of its scope, procedures and expected outputs.

Why is it important? The elaboration of a strategic plan establishes trust among stakeholders and increases the effectiveness and credibility of the process. It also minimises the chance of misunderstanding and conflict. Having a strategy ready prior to implementation is vital for reaching the project's objectives.

What key aspects should be considered? It is important to:

- Define the scope and overall aim of the participatory process;
- Specify clear objectives for each stage of the process;
- Involve professional communication experts from the beginning;
- Map the stakeholders (from strategic to operational level) and specify how they will be involved (stakeholder mapping);
- Choose suitable tools and instruments for implementation;
- Prepare for potential implementation risks;
- Make a feasible timeline and a budget;
- Decide how to monitor and evaluate the impact of the citizen involvement (make feedback loops possible).

BEST PRACTICE EXAMPLES

Design thinking method. The method is recommended for defining a communication strategy. It includes focus groups, interviews, user testing, pilot feedbacks etc.

Multiplicators. In some cases there exists a general mistrust towards (governmental) institutions. Working with local associations, community managers or local parish councils can be a good practice for conveying the message to the citizens in a faster and more efficient way. Still, the messengers must be well informed, in order to convincingly communicate the information to the citizens. It is a good practice to involve them already in project development phase.



Figure 10: Sketch of how the agreement worked. Source: AMIU.

Competition for associations. The municipality of Genoa has provided a small budget for projects conducted by associations, in form of a competition. In order to get best results in line with the city's

strategy, the city defined the criteria for the competition. As result, the city gave money to associations, but at the same time ensured that it was spent on activities that support the fulfilment of city's objectives (e.g. increasing awareness in the area of waste collection).

INCLUSIVITY

What does it mean? Inclusivity means ensuring a variety of perspectives through involvement of various affected citizens groups.

Why is it important? It increases trust in authorities and probability of environmental and social decisions' acceptance, thus making successful measure implementation more likely. Citizens' involvement offers new perspectives to solutions proposed by the actors in charge of waste management, making them more suitable for addressing citizens' needs.

What key aspects should be considered?

- Accessibility to information can be ensured through choosing effective means of communication suitable for the selected target groups;
- Use of a variety of citizen involvement tools and communication channels allows for reaching a wide range of population (e.g.: printed booklets, newsletters, call center for elderly; social media like Twitter, Facebook, Instagram, You Tube, apps for teenagers / young adults; environmental education for children);
- Ethnic minorities can be reached through provision of information in several foreign languages and by local facilitators;
- Community of disabled people has very particular needs and should be involved through their representative associations.

BEST PRACTICE EXAMPLES

Children teaching parents. In the City of Genoa, when the collection system in a neighbourhood was changed, the waste management company organised information activities in schools, where the system was explained. The pupils have then transferred the newly acquired knowledge to their parents.

Reaching teenagers and students. The waste management company of Genoa conducts different projects in high schools, while university students are reached through info points in the public libraries.

Reaching the elderly. In order to reach the elderly, the City of Genoa replaces printed material (potential waste) with direct contact. To encourage participation of elderly in public meetings, the attendees were given free tickets to a garden exhibition, what resulted in high participation rates.

Reaching ethnic minorities. The City of Hamburg prepared a stakeholder mapping in cooperation with associations of different cultural groups and invited them to participate in a workshop, during which leaflets on waste sorting were prepared in foreign languages.

TRANSPARENCY

What does it mean? Transparency means clearly disclosing information, rules, plans, processes and actions. It implies provision of relevant, complete and clear information.

Why is it important? It increases the citizens' trust in the system and authorities, through provision of credibility and legitimacy to the process.

What key aspects should be considered?

- Communication needs to be clear and easy to understand (simple vocabulary). Pictures/illustrations, showing people as examples, as well as intense colours attract attention;
- Positive messages can mobilise and inspire the citizens;
- Citizen involvement activities should be fun and engaging;
- It should be explained how the waste is to be separated, why should this be done and what happens with it afterwards, so citizens can see that their efforts are meaningful;
- Provision of practical tips can help citizens find out how to improve their behaviour. The gains for the individual, but also for the collective should be highlighted;
- Convenience plays a vital role – good waste infrastructure accessibility has a positive impact on participation rates;
- Incentives (e.g.: discounts on waste tax or in shops) can further support the promotion of behavioural change.

BEST PRACTICE EXAMPLES

Convenience. The City of Copenhagen has placed containers for plastic bags and glass bottles with no refund in three retail shops right next to the PET bottle collection machine.

Convenience. Another example of convenience is the CYCEL online platform (reCYCLE your Electronics, www.cycl.de) in Hamburg, which provides all information needed to deal with a broken electronic device (repair guidelines, repair cafes' addresses, donation possibilities, correct disposal).

Intermediaries. The waste management process and reasoning behind it can be explained not only to the citizens, but also to associations and journalists, who act as intermediaries and communicate the information to their audiences and networks.

Shopping Guide. Hamburg's waste management company made a shopping guide that includes information on recyclability of different popular packaging types and explains how to sort them to increase their recyclability.

Visibility of infrastructure. In the City of Lisbon during local events bins are made more visible through re-usable textile flags or people that are standing next to the bins to explain the correct disposal of waste.

CONTINUITY

What does it mean? Continuity refers to the timeframe for the implementation of tools and strategies, implying the length and frequency of their application.

Why is it important? It increases the citizens' trust in the system and stakeholders, through the provision of credibility and legitimacy to the process.

What key aspects should be considered?

- Providing information over a longer period of time and on a regular basis fosters behaviour change;
- Continuity of activities prevents people from losing interest in the topic and wasting the efforts and investments already made for the development of communication activities;
- Regular exchange allows for trust building and strengthening of the relationship between the city/waste management company and other stakeholders;
- Connecting the waste topic to currently popular issue (e.g.: Fridays for Future) can make it more visible;
- Applying different tools and communication channels contributes to reaching different target groups and promotes continuous engagement;
- Regular monitoring of impacts, results and learnings is essential, in order to make adjustment during the process.

BEST PRACTICE EXAMPLES

Paying attention to holidays. In order to achieve behavioural change, the communication plan should consist of several moments of more intense communication. These should be planned shortly before big holidays, like Christmas or Easter, when people tend to consume more.

Cleaning days. In Hamburg there exist a couple of days in the year on which citizens can contribute to the cleaning of their city. This initiative has been very successful so far: in the year 2017 there number of participants increased by 10.000 people (in comparison to the year 2016) and a decrease of collected waste could be observed.



Figure 11: Associations' volunteers trained by Amiu distributing bins and information for bio waste collection. Source: AMIU.

The importance of networks. Having a broad network of different target groups in place makes it easier to ensure continuity of participatory activities. Such effort can be exemplified by Genoa with the training of volunteers to communicate directly with the citizens.

RESOURCES DEDICATED

What does it mean? Resources dedicated refer to the compatibility of time, personnel and financial resources dedicated to the project and its predefined goals.

Why is it important? The allocation of appropriate resources to citizen involvement activities contributes to its effectiveness and credibility of the conveyed message and the communicator.

What key aspects should be considered?

- Involvement of skilled people (e.g.: topic experts, local authorities, community representatives) can ensure higher quality of the process' outcomes;
- Knowledge of the topic area is vital for ensuring credibility of the communicator and the provided information;
- Expertise in participative processes (e.g.: facilitation) and tools (e.g.: focus groups), as well as the skill of active listening are important;
- Social media is one of the most cost-effective citizen involvement tool. Still, participatory processes are generally more expensive in the beginning, but in the long run they become cheaper and also more effective (especially if the participants pass the key messages onwards);
- Education of waste management company employees (e.g.: those who drive the waste trucks and empty bins) enables them to provide accurate responses to citizens' questions.

BEST PRACTICE EXAMPLES

Household waste analysis. Once per year Hamburg's waste management company conducts a household waste analysis, which is based on samples, in order to measure the amounts of waste being collected and the changes in separation behaviour. Decrease of residual waste means better separation quality (less misthrows) and is balanced with an increase of the separable fractions, which proves better separation behaviour. Feedback can also be provided through the waste management company's call center, which also feeds into measurement together with the numbers and feedback from websites and social media. It is recommended to base evaluation criteria on household waste analysis, which allows for assessing the cost-effectiveness of the applied citizen involvement tools.



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